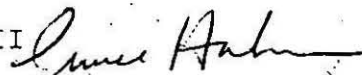


U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION REPORT

I. HEADING

Date: February 20, 2001, REVISED June 1, 2004

From: Irmee Huhn, OSC, Region II  
Removal Action Branch



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Subject: Pyridium Mercury Disposal Site No. 1 (Pyridium 1)  
Village of Harriman, Orange County, New York

POLREP NO. Twelve (12) and FINAL \*\* REVISED Key issues and costs\*\*

As a result of an inquiry from a local property owner, this polrep has been revised to include information regarding contamination that was left behind at the Site at depth due to Department of Transportation road setback requirements.) See Key Issues and Cost Information.

II. BACKGROUND

Site No.: EV  
Response Authority: CERCLA  
NPL Status: Non-NPL  
State Notification: NYSDOH notified  
Action Memo Status: Signed 09/29/95, 9/25/97 and 3/6/98  
Start Date: 1/9/95, 9/30/97, and 3/18/98  
Demobilization Date: 4/5/95, 3/13/98, 8/5/98  
Completion Date: 4/7/95, 3/13/98, 8/5/98

III. SITE INFORMATION

A. Incident Category: Illegal dump

B. Site Description

1. Site location

The Pyridium Mercury Disposal Site No. 1 (Pyridium 1) was a trailer park located at the intersection of State Route 17M and Harriman Heights Road in the Village of Harriman, Orange County, New York. Five mobile home trailers were located at the trailer park. All the trailers were occupied as residential dwellings.

A white clay-like material discovered at the trailer park was used to fill low-lying areas of a wetland. This material was reportedly a waste product from the production of niacinamide by the Pyridium Corporation during the 1940's and 1950's. Nepera Inc. of Harriman, New York, currently occupies and operates the facility previously operated by the Pyridium Corporation.

C. Preliminary Assessment/Site Inspection Results

On October 20, 1994, the United States Environmental Protection Agency (EPA) collected a composite waste sample for waste characterization and mercury speciation. The sample was analyzed for Target Compound List (TCL) parameters, Target Analyte List (TAL) parameters and toxicity by the Toxicity Characteristic Leachate Procedure (TCLP).

Although the TCLP results are below regulatory limits, the TAL analytical results indicate the presence of mercury at an estimated concentration of 130 milligrams per kilogram (mg/kg). All the other compounds detected were below the New York State Department of Environmental Conservation (NYSDEC) recommended soil cleanup objectives.

Mercury speciation analytical results indicated that the sample contained no significant quantities of elemental mercury, mono-methyl mercury, or dimethyl mercury. When the sample was dissolved in an acid leach test, the mercury +2 ion leachate concentration was essentially the same as the total mercury concentration. Based on these results, the laboratory concluded that the sample was a chemical substrate contaminated with a mercuric or mercurous salt.

On November 17, 1994, the EPA Environmental Response Team

(ERT) and the Response Engineering and Analytical Contractor (REAC) collected dust samples in each of the mobile homes at the trailer park. The analytical results of the dust sampling indicated mercury concentrations ranging from 0.84 mg/kg to 26.8 mg/kg.

On November 28, 1994, Nepera, Inc. of Harriman, New York signed an Administrative Order on Consent (AOC) with EPA agreeing to fund relocation of the residents of the trailer park. Nepera has distributed relocation settlements to eligible residents. The amount of the settlement was based on federal relocation guidelines.

On January 9, 1995, verbal authorization was given by the EPA Director of the Emergency and Remedial Response Division to decontaminate, remove and dispose of the mobile homes, storage sheds and decks from the trailer park; disconnect water, sewer and electric utilities; remove heating oil and propane storage tanks; and fence the property and post warning signs. An Action Memorandum confirming verbal authorization was approved on February 27, 1996. For specific details refer to Polreps 1-3.

#### IV. RESPONSE INFORMATION

##### A. Situation

###### 1. Current situation

On February 9, 1999, 23 borings were advanced utilizing a Geoprobe sampling device to confirm the rejected data collected during the excavation. All sample results were below the clean up level.

###### 2. Removal actions to date

Some validated post excavation soil sampling results collected during the excavation between May and July 1998 were rejected due to matrix spike recoveries outside of the acceptable limits. Due to the rejected data, on February 8, EPA and START went up to the site and identified sample locations for collection utilizing a Geoprobe. On February 9, the Research Engineering and Analytical Contract (REAC) conducted a post removal confirmation soil sampling and analysis effort to confirm the Removal Action was effective in removing the mercury to the clean up level. The 23 borings were collected at the boundary between the fill and natural material. The results indicated that eight of the 23 locations had



detectable mercury concentrations between 0.12 and 6.5 mg/kg mercury, which is well below the cleanup level of 25 mg/kg mercury. The post excavation sampling trip report was finalized and placed in the local and Edison repository.

This completes the items described in the action memorandum for the site.

### 3. Enforcement

The Office of Regional Council is reviewing available site documentation to identify PRPs and will evaluate the viability of legal claims stated by Nepera.

#### B. Next Steps

None.

#### C. Key Issues

The clean up level for mercury was 25 parts per million which was achieved around the site with the exception of an area adjacent to route 17M. Along the highway, a 10' standoff was maintained to avoid undermining the highway. In this area, waste remains at a depth of approximately 3.5' in the shoulder of the roadway. A sample of the waste was collected to determine what concentration was remaining. The concentration of mercury was 419 ppm. The industrial clean up level for mercury is 600 ppm. Since this material is below a depth of 3 feet and along the shoulder of the road, we feel the risk is minimal to the general public. This is at the location of the sewer line which runs parallel with Route 17M.

The material is a inorganic mercury salt which is not readily mobile. Anyone who would excavate in the area of the shoulder should follow good hygiene practices and replace the waste material in the same sequence it is removed. This will reduce the spread of the contamination and potential exposure at the surface.

### V. COST INFORMATION

The following are estimated costs for the removal action as of February 16, 2001:

	PROJECT CEILING	PREVIOUS COSTS	COSTS TO DATE	FUNDS REMAINING
ERRS (ERCS) Costs	\$1,028,400	\$102,000	\$692,900	\$233,500
RST (START) (TAT) Costs	\$ 81,400	\$ 19,700	\$ 51,918	\$ 9,782
Contingency	\$ 209,500			\$209,500
EPA Cost	\$ 107,000	\$ 24,200	\$ 53,830	\$ 28,970
TOTAL PROJECT CEILING	\$1,426,300	\$145,900	\$798,648	\$481,752

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure, which the EPA may include in any claims for cost recovery.

# VI. DISPOSITION OF WASTE

Waste stream	Medium	Quantity	Containment-Migration Control	Treatment	Disposal
Non-hazardous soil, wood, PPE and debris	solid	5,995 tons	dump trailers/triaxle dump trucks	landfill	G.R.O.W.S. Landfill, Morrisville, PA
Non-hazardous soil, wood, PPE and debris	solid	665 tons	dump trailers/triaxle dump trucks	landfill	Tullytown Resource Recovery Facility, Tullytown, PA
Non-hazardous, non-DOT water contaminated with mercury	water	147,714 gallons	tanker truck	waste water treatment	Cycle Chem/Clean Venture Inc. Camden, NJ
Non-hazardous, non-DOT water contaminated with mercury	water	41,730 gallons	tanker truck	waste water treatment	Clean Harbors of Connecticut, Bristol, CT